Morus nigra

Morus nigra, called **black mulberry**[3] (not to be confused with the blackberries that are various species of *Rubus*),[4] is a species of flowering plant in the family Moraceae that is native to southwestern Asia, where it has been cultivated for so long that its precise natural range is unknown.[5] The black mulberry is known for its large number of chromosomes.

Description

Morus nigra is a deciduous tree growing to 12 metres (39 feet) tall by 15 m (49 ft) broad. The leaves are 10–20 centimetres (4–8 inches) long by 6–10 cm (2–4 in) broad – up to 23 cm (9 in) long on vigorous shoots, downy on the underside, the upper surface rough with very short, stiff hairs. Each cell has 308 chromosomes in total, and exhibits tetratetracontaploidy (44*x*), meaning that its genome contains seven chromosomes, and each cell has 44 copies of each.[6]

The fruit is a compound cluster of several small drupes that are dark purple, almost black when ripe, and they are 2.5 cm (1 in) in diameter.[7] Black mulberry is richly flavoured, similar to the red mulberry (*Morus rubra*) rather than the more insipid fruit of the white mulberry (*Morus alba*). Mulberry fruit color derives from anthocyanins.[8]

Sometimes other mulberry species are confused with black mulberry, particularly black-fruited individuals of the white mulberry. Black mulberry may be distinguished from the other species by the uniformly hairy lower surface of its leaves.[9]

Cultivation and uses

Black mulberries (*Morus nigra*) are thought to have originated in the mountainous areas of Mesopotamia and Persia (i.e. Armenian highlands). Black mulberry is planted, and often naturalised, west across much of Europe, including Ukraine, and east into China. Now they are widespread throughout Armenia, Afghanistan, Iraq, Iran, India, Pakistan, Syria, Lebanon, Jordan, Palestine, Israel, and Turkey.

The fruit is edible[7] and the tree has long been cultivated for this property. Both the tree and the fruit are known by the Persian-derived names *toot* (mulberry) or *shahtoot* (شاه توت) (king's or "superior" mulberry), or, in Arabic, as shajarat tukki. Often, jams and sherbets are made from the fruit in this region.

In Europe, the largest-documented local concentration of black mulberries may be found in the vineyards of Pukanec in Slovakia, [10] which contain 470 black mulberry trees.

The black mulberry was imported into Britain in the 17th century in the hope that it would be useful in the cultivation of silkworms (*Bombyx mori*). It was unsuccessful in that enterprise because silkworms prefer the white mulberry. However, the plantings have left a legacy of large and old trees in many country house gardens and it was listed in the Award of Garden Merit of the Royal Horticultural Society until 2013. It was much used in folk medicine, especially in the treatment of ringworm.

Gallery

Leaf of *Morus nigra*

Ripe fruit and foliage of *Morus nigra*

Black mulberry

Plate from book: Flora of Germany, Austria, and Switzerland (1885)

Scientific classification	
Kingdom:	Plantae
Clade:	Tracheophytes
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Rosales
Family:	Moraceae
Genus:	*Morus*
Species:	***M. nigra***

Binomial name

Morus nigra
L.

A centuries-old tree of *Morus nigra*

Female flowers of *Morus nigra*

An old black mulberry tree in spring

Unripe *shahtoot* (Iran)

Full-grown *shahtoot*

From Algeria *Morus nigra*

Mulberries, raw Nutritional value per 100 g (3.5 oz)		
Energy	180 kJ (43 kcal)	
Carbohydrates	9.8 g	
Sugars	8.1	
Dietary fiber	1.7 g	
Fat	0.39 g	
Saturated	0.27 g	
Monounsaturated	0.041 g	
Polyunsaturated	0.207 g	
Protein	1.44 g	
Vitamins	**Quantity**	**%DV†**
Vitamin A equiv.	1 µg	0%
Vitamin A	25 IU	
Thiamine (B_1)	0.029 mg	2%
Riboflavin (B_2)	0.101 mg	8%
Niacin (B_3)	0.62 mg	4%
Vitamin B_6	0.05 mg	3%
Folate (B_9)	6 µg	2%
Choline	12.3 mg	2%
Vitamin C	36.4 mg	40%
Vitamin E	0.87 mg	6%
Vitamin K	7.8 µg	7%
Minerals	**Quantity**	**%DV†**
Calcium	39 mg	3%
Iron	1.85 mg	10%
Magnesium	18 mg	4%

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Phosphorus	38 mg	3%
Potassium	194 mg	6%
Sodium	10 mg	0%
Zinc	0.12 mg	1%

Link to USDA Database entry (https://web.archive.org/web/20160309055501/https://ndb.nal.usda.gov/ndb/search/list?qlookup=09190&format=Full)

†Percentages estimated using US recommendations for adults,[1] except for potassium, which is estimated based on expert recommendation from the National Academies.[2]

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External links

- Flora of China: *Morus nigra* (http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=220008839)

Wikispecies has information related to ***Morus nigra***.

Wikimedia Commons has media related to ***Black Mulberry***.